



Solid Waste Update

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Kansas Solid Waste Management Hall of Fame Established

by Bill Bider

Many people have contributed to improved solid waste management in Kansas over the past decade. A fewer number of people have demonstrated exceptional leadership in this area by improving their own organizations and influencing others to make changes which have yielded benefits to Kansas communities and to environmental quality. These leaders were recently honored for their achievements by being the first people inducted into the newly formed "*Kansas Solid Waste Management Hall of Fame*" at the WORKS! Conference held in Lindsborg in March 2004.

The four inaugural inductees into the Hall of Fame this year are listed below with a brief summary of their contributions to our state:

Wes Adell - Environmental Consultant; co-creator of Recycling & Composting Works! Conference with KDHE; trainer and promoter of composting in Kansas; international award winner and consultant to developing nations on composting and sustainable development.

Chiquita Cornelius - Executive Director, Kansas BIRP; state coordinator of Keep Kansas Beautiful program; provider of recycling information, including a state directory, to all Kansans; coordinator of Shawnee County

Keep America Beautiful Program; served on Governor's Waste Reduction Grants Advisory Committee from inception (1996) to present.

Charlie Sedlock - Division Manager, Hamm Waste; manager of regional Subtitle D landfill; played key role in establishing several major transfer stations; helped establish Kansas chapter of SWANA; served as a key trainer in several landfill and transfer station operator workshops sponsored by KDHE.



2004 Solid Waste Management Hall of Fame Inductees

Kent Seyfried - Solid Waste Manager for City of Olathe; oversees comprehensive integrated waste management system including waste collection, curbside collection of recyclables, composting, transfer station operations, C & D landfill, and household hazardous waste; served as Kansas' first international director of SWANA and coordinated the first SWANA truck rodeo in Kansas.

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Facility Focus: Nemaha County Recycling Program Serves as Hub Facility for Northeast Kansas

by Kristi Wilson

When new stricter landfill regulations went into effect in the early 1990s, many small landfills closed and the costs to landfill waste increased significantly. Consequently, many cities and counties developed recycling programs to divert materials out of the waste stream. Over the past decade, some small, grass-roots programs expanded into major recycling programs which process large amounts of recyclables from multiple communities and counties. These regional programs are called “hub” facilities and serve as the main processing centers for the smaller collection programs throughout their area. An excellent example of a recently developed hub is the Nemaha County Recycling Program in Seneca, Kansas.

The Nemaha County Recycling Program began in 1991 when a group of individuals interested in educating the residents about recycling and waste reduction activities met to discuss a volunteer recycling drop-off program. This group developed program goals and recruited volunteers to oversee the first recycling drop-off day in the Spring of 1992. Since then, this recycling program has grown to include not only all of Nemaha County, but also cities in Doniphan, Brown, Marshall, and Pottawatomie Counties. Nemaha County has continued to expand its recycling program through the sale of recycled products, and funding support from the county and several grants from KDHE.

The Nemaha County Recycling Program offers flexible arrangements with the cities and counties participating in their program. All cities and counties provide collection sites and, in some cases, government personnel to assist with site operations. Other collection sites are manned entirely by volunteers from schools, civic groups and the general public. The original founding group, now called the Nemaha County Recycling Committee, continues to work with the County to develop goals, coordinate volunteers, and maintain a strong public education effort throughout the region.

Nemaha County Recycling Program accepts the following items at their facility: aluminum, cardboard, textiles, glass, newsprint, magazines, office paper, plastic containers (#1 and #2), tin cans, steel, oil and oil filters. Nemaha County has made a special effort to work with area businesses and industry to significantly increase the amount of cardboard and paper products collected and marketed through their facility. Recently, Nemaha County discovered a market for (continued on page 4)



“Can you hear me now?” What is Up with E-Wastes?

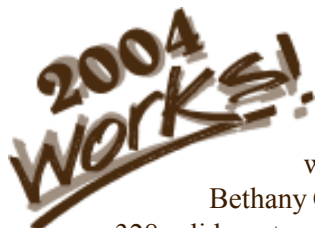
by Kent Foerster

Defunct electronics including personal computers (PCs), monitors, fax machines, televisions (TVs), videocassette recorders (VCRs), printers, scanners, copy machines, stereos and digital video disc players (DVDs) and a variety of handheld electronics, including cell phones, pagers, personal digital assistants (PDAs), radios, MP3 players and video games are piling up in businesses, homes, and landfills.

What are the concerns? The US Environmental Protection Agency (EPA) funded University of Florida research determined that electronic devices leach enough hazardous materials to be considered hazardous waste. Hazardous materials present in electronics include: mercury, arsenic, cadmium, barium, silver, selenium, chromium and lead plus the brominated flame retardants PBDE and PBB. Concerns regarding these hazards as well as landfill and natural resource conservation have triggered many states to consider various landfill diversion and recycling initiatives. Maine, Massachusetts, and Minnesota are instituting statewide bans on the disposal of electronics. (continued on page 6)

10th Annual *WORKS!* Conference - A Decade of Progress

by Marty Burke



The 10th annual *WORKS!* conference on recycling, composting and household hazardous waste management was held on the campus of Bethany College in Lindsborg on March 23-25. A total of 328 solid waste managers, private business owners, public officials, community organizers and others interested in waste reduction and environmental stewardship attended the conference coming from as far away as Alaska.

The conference theme was health and safety in recycling, composting and household hazardous waste management with state and national experts in these fields providing training and workshops. Well-known news commentator and native Kansan, Bill Kurtis, presented the keynote address during the conference general session.

New this year was the “Kansas Solid Waste Management Hall of Fame” recognizing individuals for a decade of contribution to effective waste management (see separate article). In addition, the Big Lakes Regional Household Hazardous Waste program, City of El Dorado recycling program, and Seward County Landfill composting program received achievement awards for their efforts over the past year.

Another conference highlight was the first public viewing of the “Ten Years of Progress” video featuring highlights of improvements in solid waste management in Kansas over the last decade. Stay tuned for broadcast dates of the feature on public television stations across the State.



“Ten Years of Progress” Feature Video Available

by Marty Burke

First presented at the *WORKS!* 2004 conference in March (see separate article) the feature video “Ten Years of Progress” documents significant improvements in solid waste management in Kansas. In addition to a historical account of waste management in Kansas, this 19-minute video also features interviews with facility managers, regional officials, and state regulators. A limited number of free VHS tape copies are now available for distribution. To request a copy, contact the Bureau of Waste Management, (785) 296-1600. An agreement to share the video with an audience and report their reaction is required.

HHW Refresher Training

Kansas Department of Health and Environment staff has recently completed the 2004 8-hour refresher training for the State’s Household Hazardous Waste (HHW) operators. A total of 285 individuals completed the training at seven sites across Kansas. This is the first year that training has been conducted by KDHE staff. Comments received from attendees indicated the training was well received and specifically tailored to the needs of Kansas HHW workers. Plans are for KDHE staff to continue to offer refresher training in 2005. The Department is currently under contract with Galitzer and Associates to conduct 24-hour HHW training through FY 2005. To obtain additional information on the Kansas HHW training program contact Maria Albert at (785) 296-1611 or malbert@kdhe.state.ks.us.

Common Challenges for Compost Facility Operators

by Ken Powell

This article lists several common complaints and problems received by KDHE regarding compost facilities and offers some recommendations to improve operations and design.

Odors

The most common complaint concerns odors from composting facilities. While it is almost impossible to operate an odorless composting facility, odors can be controlled by proper management practices. Procedures to minimize odors are maintaining an appropriate mix of materials, keeping the moisture content in the proper range, and pile turning when the winds will not blow odors toward residential areas. If odor complaints are received, you should evaluate your facility's operational procedures to determine whether changes can be implemented to minimize odor problems.

Trash and Other Inappropriate Materials

A common problem at composting facilities concerns trash and inappropriate materials left at the site. Some facilities have had success by placing a trash container (barrel or dumpster) for the public to place solid waste. Other facilities have experienced increased illegal dumping when providing these containers. A good way to prevent trash and inappropriate material is to develop and implement a good public education program and to provide clear signs. Since personnel are required to be at the facility during operation, they should routinely provide educational materials and supervise material delivery.

Timing of Material Delivered to the Facility

Most of the material delivered in the spring is green (high nitrogen) and most of the material delivered in the fall is brown (high carbon). The best option for a small site is to store the leaves over the winter and mix them one to one by volume with the grass received in the spring. This provides a good carbon to nitrogen ratio as well as providing good texture for adequate air flow through the compost rows or static piles.



Facility Focus: Nemaha County Recycling Program

(continued from page 2)

poly-lined bags (feed bags). The materials processed in the hub facility are taken directly to end-markets located in Kansas, Colorado, Iowa, and Oklahoma. Recently, Nemaha County has begun to collect additional recyclable materials from counties located along the return routes from the end-markets. These collection agreements allow more counties to conveniently move recyclables and open up limited storage space. It also helps Nemaha County to maintain full loads when shipping to markets.

By being flexible and meeting their partners' needs, the Nemaha County Recycling Program has doubled the amount of recycled materials processed through their facility from 1997 (522 tons) to 2003 (1,065 tons). Matt McFall, Director of the Nemaha County Recycling Program, predicts that the growth trend will continue. "We finally are getting industry to participate in our program. Due to this, I believe we will grow substantially again this year."

Poor Pad Design or Construction

Poor pad design or construction can lead to ponding of water, muddy conditions, erosion, and difficulties in site usage during inclement weather. It is almost impossible to make pad improvements if the pad is in use. While the regulations only require a yard waste pad to support the equipment, a higher quality pad design is recommended to facilitate operations all year. An all weather pad for the public drop-off area is important to minimize activity on the composting pad. A good maintenance program is essential to pad life. Ruts or areas of erosion should be fixed while small to allow the pad to remain useable. This helps avoid major renovation projects where the facility must temporarily shut down.

The Bureau of Waste Management Evaluates Safety Practices at Composting and Recycling Facilities *by Dennis Degner*

During August - November 2003 safety practices were assessed at seven active composting facilities and 21 active recycling facilities in Kansas. A summary of serious observed and potential hazards at one or more facilities follows:

Compost Facilities

- Trash and chunks of concrete present in windrows could become projectiles and cause serious physical harm to equipment operators or nearby observers
- There was a lack of signage to safely direct traffic
- Safety equipment was poorly maintained
- Safety plans were available at only two of seven facilities

Recycling Facilities

- Equipment maintenance lockout/tagout systems were not fully operational
- Multiple equipment operations had noise levels that would cause hearing loss
- Interior lighting levels were inadequate for safe operations
- Flammable materials were not stored properly
- Backup alarms were not operational on forklifts and towing vehicles
- Hazard paint stripping or barricades were not being used around paper baler pits
- Railings were absent at loading docks
- Bollards were not present to protect gas meters and fuel storage tanks
- Safety glasses and full-face respirators were not always used or available when needed
- Machines did not have guards on moving parts
- Fire extinguishers were inadequate in number, not recently inspected, and inaccessible
- Public had to cross operations traffic



For further information on this study, including the questionnaire used, and recommendations for improved safety practices, visit our website at www.kdhe.state.ks.us/waste or contact Dennis Degner at (785) 296-1601.

Bureau of Waste Management Outreach Program Hits the Road

by Jim Rudeen

After several years of promoting the Kansas Don't Spoil It! program, the KDHE Bureau of Waste Management plans to "put the show on the road." This spring, bureau staff will be outfitting a dual-axle cargo trailer as part of a traveling environmental education program. The waste management trailer will transport displays and education modules to classrooms, fairs, and conferences. The trailer is decorated with eye catching graphics identifying it with KDHE, Bureau of Waste Management, and the Kansas Don't Spoil It! program.

The Bureau of Waste Management is in the process of developing the materials to be included in the trailer including kids games, large posters, and a three-dimensional interactive landfill model. The bureau will continue to develop new materials and is open to suggestions by the Kansas public. Some future ideas being considered include models and activities on household hazardous waste management, recycled content products, sorting recyclables and home composting. Ultimately, we hope to have a wide variety of items to cover all age groups.

Initial use of the mobile education trailer will be by bureau staff at schools, fairs, water festivals, lawn and garden shows, and at our own conferences and training seminars to demonstrate principles of waste management. Eventually, the bureau hopes to offer use of the trailer to local units of government. An agreement for use and waiver of liability will be developed for parties outside KDHE.

An operating manual for the trailer is under development. It will include instructions on attaching the trailer to the tow vehicle, securing interior contents for transport, and using displays and models. It will also list trailer contents, limits on intended uses, and a procedure for reporting missing or defective items.

For additional information on the trailer or to schedule it for an event near you, contact Jim Rudeen, Bureau of Waste Management, (785) 296-1603 or jrudeen@kdhe.state.ks.us.



What is Up with E-Wastes? *(continued from page 2)*

Massachusetts set up a statewide infrastructure to handle these wastes. EPA is considering regulation changes to deal with the concerns while allowing for recycling and reuse of E-Waste.

E-Waste accounts for two-five percent of the U.S. municipal solid waste stream but is growing rapidly. Some estimates indicate that E-Waste may account for up to 40 percent of the lead and 70 percent of the heavy metals in America's landfills. The continued flow of E-Wastes to landfills is because there is a limited infrastructure to properly recycle or reuse these wastes and individuals face price tags of \$10 to \$60 per computer and limited one-day events to recycle.

The National Electronics Product Stewardship Initiative (NEPSI) has been a three plus year negotiation between many of the manufacturers, retailers, and all levels of government to solve this problem. A tentative agreement for a national voluntary program made in February does not clear up how this will help states like Kansas.

Recently the Solid Waste Association of North America (SWANA) took a closer look at the EPA/University of Florida research. While acknowledging that E-Wastes constitute a major long-term waste management challenge, SWANA concludes that new generation landfills (called Subtitle D) with multi-layer composite liners and leachate collection and management make these facilities suitable for disposal of such wastes.

KDHE has monitored the NEPSI project, pending EPA deliberations, and the results of various studies on toxicity. Thus far, KDHE has utilized regulatory discretion allowing continued disposal in landfills while encouraging the development of E-Waste recycling facilities that will reuse and recycle these resource rich and potentially hazardous materials. KDHE has called for more research like SWANA's efforts and initiated a practical approach of not banning E-Wastes from landfills.

At the present time, there are few E-Waste recycling programs in Kansas (Wichita, Topeka, and Kansas City areas primarily) and some local programs are investigating possibilities of reuse and recycling these items.

For the most up to date listings go to www.kansasbirp.com. If you learn of a new program in your area, please contact KDHE or Kansas BIRP with any updates. Thanks.



Illegal Dumping in South Hoisington to be Cleaned Up

Several months ago, a very large area of illegal dumping was discovered in South Hoisington in Barton County. This area consists of 60 separate parcels of property, mostly containing abandoned, dilapidated homes. Dumping of waste tires, furniture, appliances, trash, and vehicles has apparently occurred for many years. In some cases, old structures are filled with trash.

KDHE has been working with Barton County and the City of Hoisington to develop a plan for cleaning up South Hoisington. Three separate clean-up programs will be used to maximize available state funding including the waste tire clean-up program, the orphan waste clean-up program designed for hazardous chemical wastes, and the illegal dump clean-up program. Barton County must contribute 25 percent of the costs of the work under the illegal dump clean-up program, but no local match is required for clean-up under the waste tire or orphan waste programs.

Clean-up work will occur in phases by waste type beginning in the summer or fall of 2004. Bob Medina will oversee this work for the Bureau of Waste Management. Future issues of Solid Waste Update will describe progress on this project.



C&D Landfills Q&A *by Paul Graves*

With the new construction and demolition landfill regulations in effect, the Bureau is fielding a lot of inquiries. Here are some common questions and answers on this topic.

Q. *I heard that KDHE is giving extensions to all the landfills. When is the new deadline?*

A. KDHE is not giving blanket extensions. Some C&D landfill permittees have requested time extensions to submit updated plans as required by K.A.R. 28-29-325(b). The time extensions vary, but most are for just 30-60 days from the original deadline of April 1, 2004. Permittees may request a time extension in writing, with suitable justification. The Bureau will respond with a letter of acknowledgement or denial. The time extensions described here are only for preparing and submitting updated plans, not for other requirements. Permittees are still responsible for complying with all other provisions in the new regulations while updated plans are being prepared.

Q. *Is it true that the regulations were designed to force landfills to close?*

A. No. Remember, the “new” regulations are mostly composed of requirements that already existed. A few new requirements were added, and some criteria were worded differently to make the regulations more comprehensive and, hopefully, easier to understand. Nevertheless, six very small landfill owners have informed us of their intent to close their C&D landfills since the new regulations were issued. Five are in the Southeast District, and one is in the Northwest District. Four are owned and operated by counties, one by a state university, and one by a private company. Whether these facilities are closing due to the new regulations or for other reasons is uncertain.

Q. *We’re still not clear on the requirement to control contact water. Our site has special circumstances that make it difficult to do this. In the past we let it flow to the creek and there were no problems. Will you help us with our design?*

A. “Contact water” is liquid, mostly rainwater, that has touched the C&D waste. Discharge of contact water from the facility is not allowed (unless you have a NPDES permit for it) because contact water may contain pollution. In fact, C&D contact water has led to stream contamination in the past, including fish kills and habitat destruction. Any site can be designed for low-cost control of contact water. Most of the time, it is as simple as a berm to hold the liquid in the disposal area. The design must be done by a Kansas-licensed professional engineer. The Bureau of Waste Management cannot assist with the design, but we can give advice as to features that may be needed at a facility to complete required upgrades.

Training Opportunity for New and Current Transfer Station Operators and Supervisors

The Kansas Department of Health and Environment and the SWANA/Kansas “Sunflower Chapter” will again be jointly sponsoring training for operators, supervisors, and managers of Municipal Solid Waste Transfer Stations (MSWTSs) November 3 and 4 in Wichita. We are planning to have another high quality training course similar to the one held in 2002 when over 60 persons attended the training in McPherson.

We plan to mail training course flyers in early September. Please watch your mail for details and plan to attend this early November training course if you are a transfer station operator, transfer station supervisor, transfer station manager, transfer station gatehouse staff member, or you are interested in learning more about transfer station operations. Knowledgeable and experienced transfer station

managers from Kansas will present their best ideas on how you can improve the quality and efficiency of operations at your MSWTS. In addition, you will be able to learn about and observe operations at the Waste Connections and Waste Disposal, L.L.C. Transfer Stations. These facilities began operations in 2001 and 2002, respectively.

*November 3 & 4, 2004
in Wichita
Watch your mail for details!*

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Calendar Items

May 2-8, 2004	International Compost Awareness Week
June 16-17, 2004	Kansas Composting Operators School (KSU) Manhattan
November 3-4, 2004	Municipal Solid Waste Transfer Station Operators and Supervisors Training Wichita

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